

LUCI E OMBRE NELLA DIAGNOSI CITOLOGICA ED ISTOLOGICA DEL CARCINOMA MIDOLLARE

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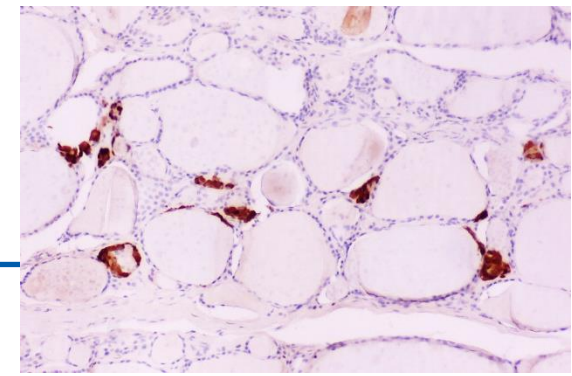
IL CARCINOMA MIDOLLARE DELLA TIROIDE

- ***2-3% di tutte le neoplasie tiroidee***
- ***Sporadica 75-80% e forma ereditaria 20-25% (MEN2A e MEN2B/ FMTC) associata a feocromocitoma e/o iperparatiroidismo***
- ***Forma sporadica: 60% mutazioni somatiche RET /30% mutazioni RAS***
- ***Forma ereditaria :100% mutazioni germinali RET***
- ***Spettro clinico variabile : " prognosi intermedia tra il papillare e l'anaplastico "***
- ***50% malattia avanzata alla diagnosi***
- ***Nodulo palpabile 70% localizzazioni linfonodali e 10% a distanza***



Current Guidelines for Management of Medullary Thyroid Carcinoma

Medullary thyroid carcinoma (MTC) is a rare neuroendocrine tumor that can produce calcitonin from parafollicular cells. Thus, both the diagnostic and therapeutic strategies for MTC differed from those used for well-differentiated thyroid cancer (DTC) derived from follicular cells

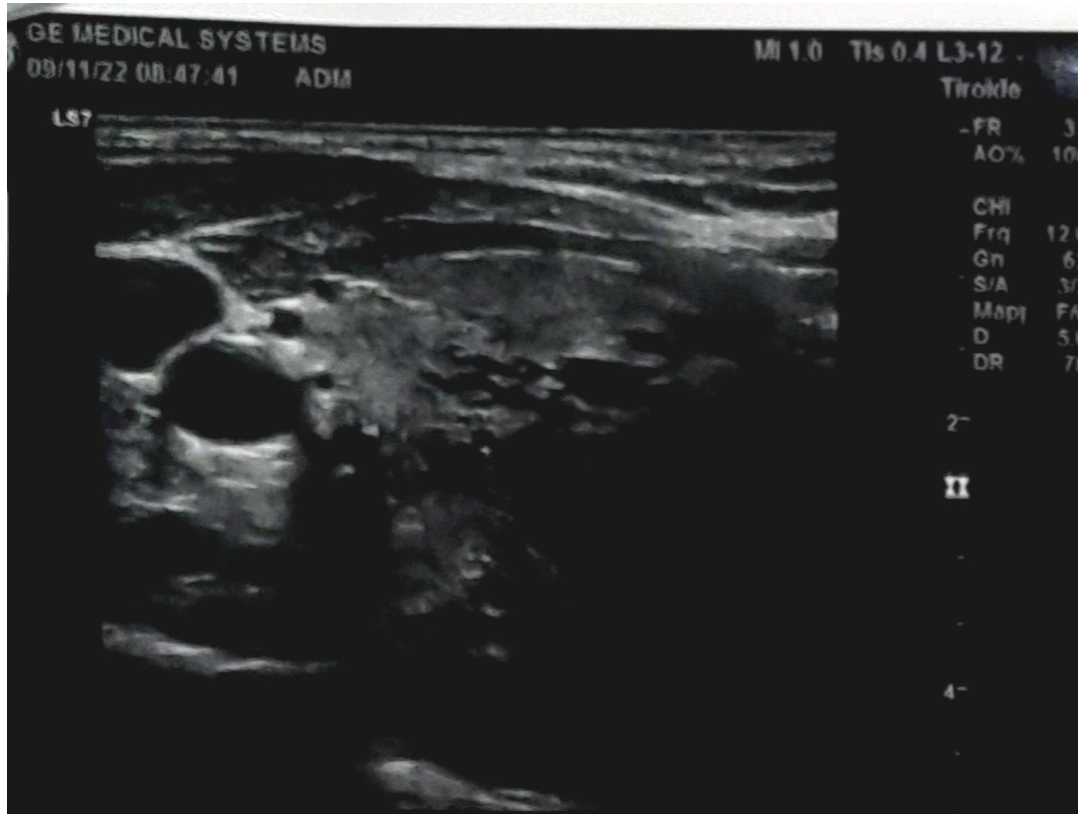


Diagnosis and pathologic characteristics of medullary thyroid carcinoma—review of current guidelines

C.M. Thomas MD PhD,^{*†} S.L. Asa MD PhD,^{‡§} S. Ezzat MD,^{||} A.M. Sawka MD PhD,[#] and D. Goldstein MD^{*†}

Most clinicians, even those in a busy thyroid practice, have significantly less experience with diagnosing, managing, treating, and knowing the pathologic characteristics of MTC compared with more common thyroid neoplasms. It is therefore pertinent to heighten awareness of this relatively rare malignancy.

CARATTERISTICHE ULTRASONOGRAFICHE DELLA NEOPLASIA MIDOLLARE

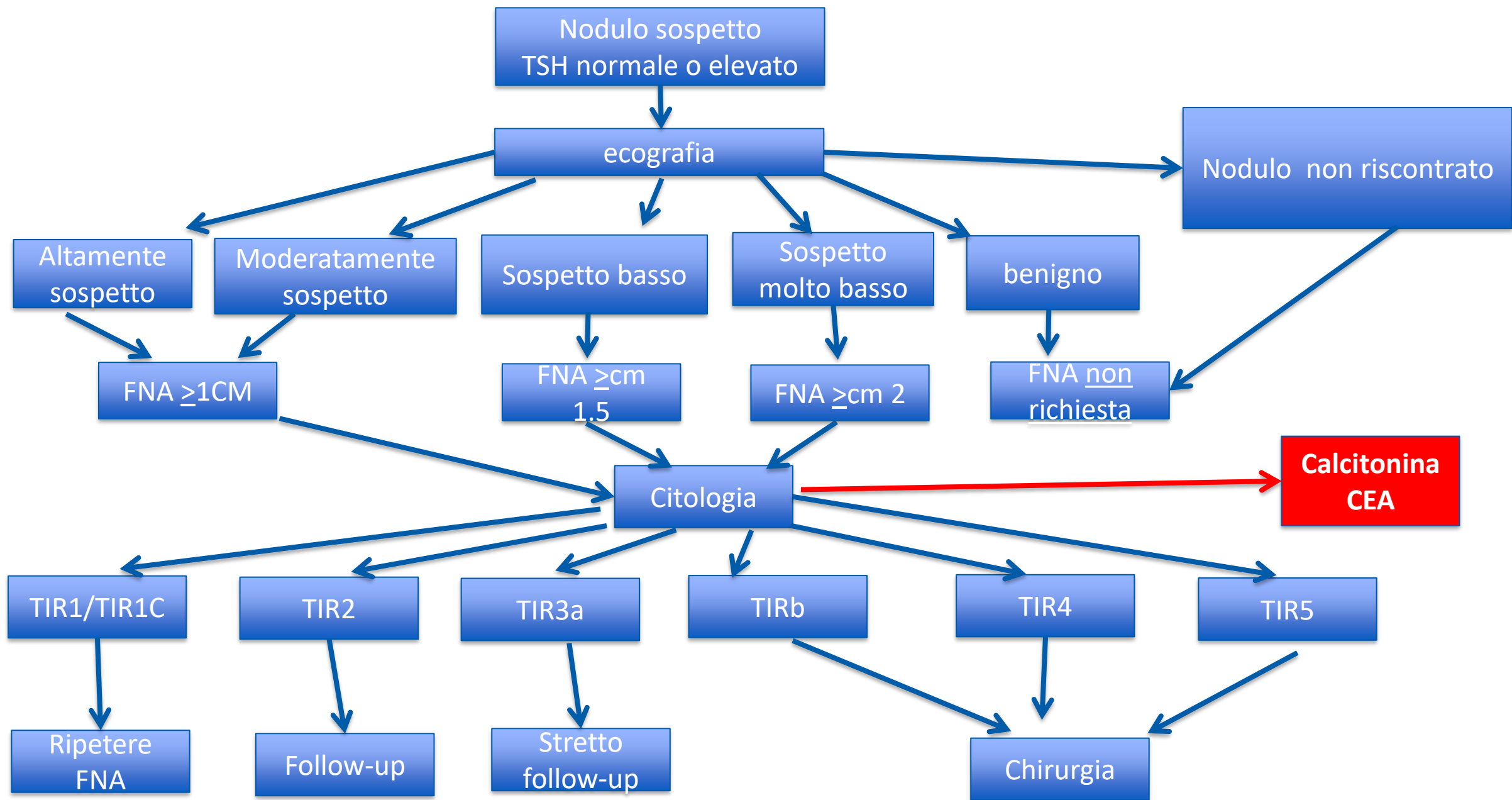


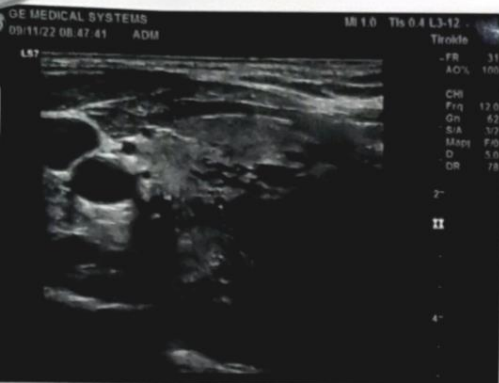
"ultrasound criteria for MTC are not significantly different from the much more common DTC"

Thomas et al. Curr Oncology 2021

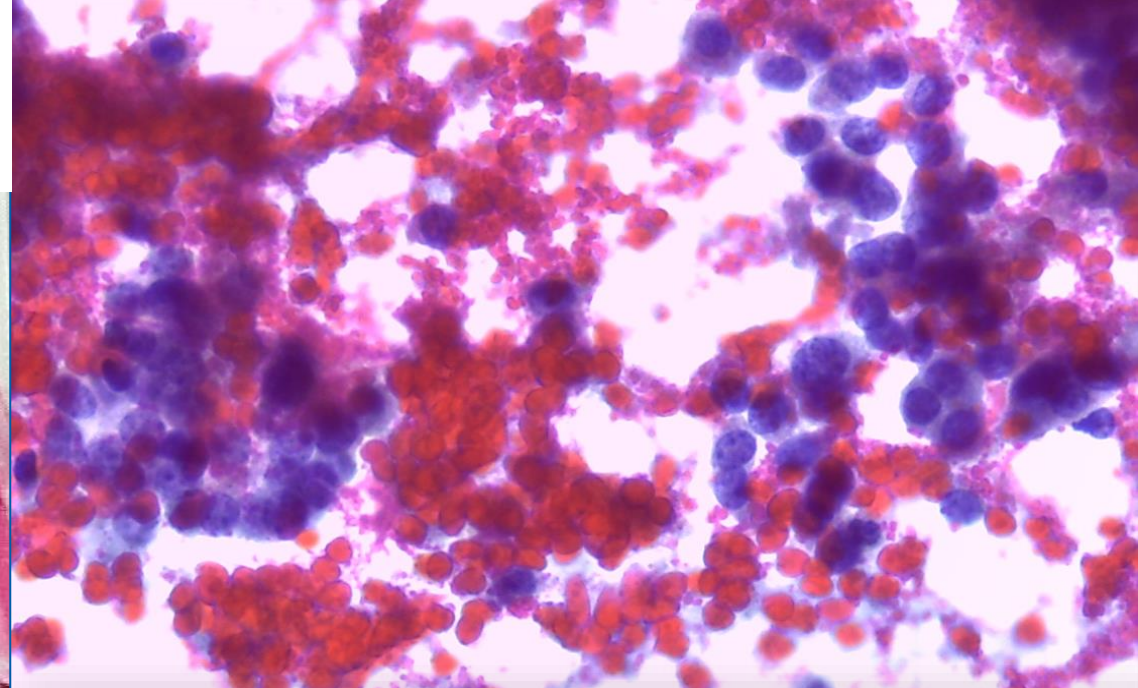
"there are no specific US features of MTC"

Matrone A. et al. Eur Jour Endocr 2021





IAI AnaPat
20-C-12345



Procedura di prelievo: **6190 - Agoaspirato tiroideo**

Numero totale di campioni: **1**

Materiali e sedi di prelievo - obiettività:

42309164-A) Vetrini fissati 0

Vetrini a secco 0

Provetta incluso 1 Lobo: sx

Quesito clinico: **nodulo tiroideo sinistro (37 mm)**

Storia clinica, dati di laboratorio e radiologici: **Si esegue agoaspirato tiroideo come da richiesta del/la dott./ssa Perrino**

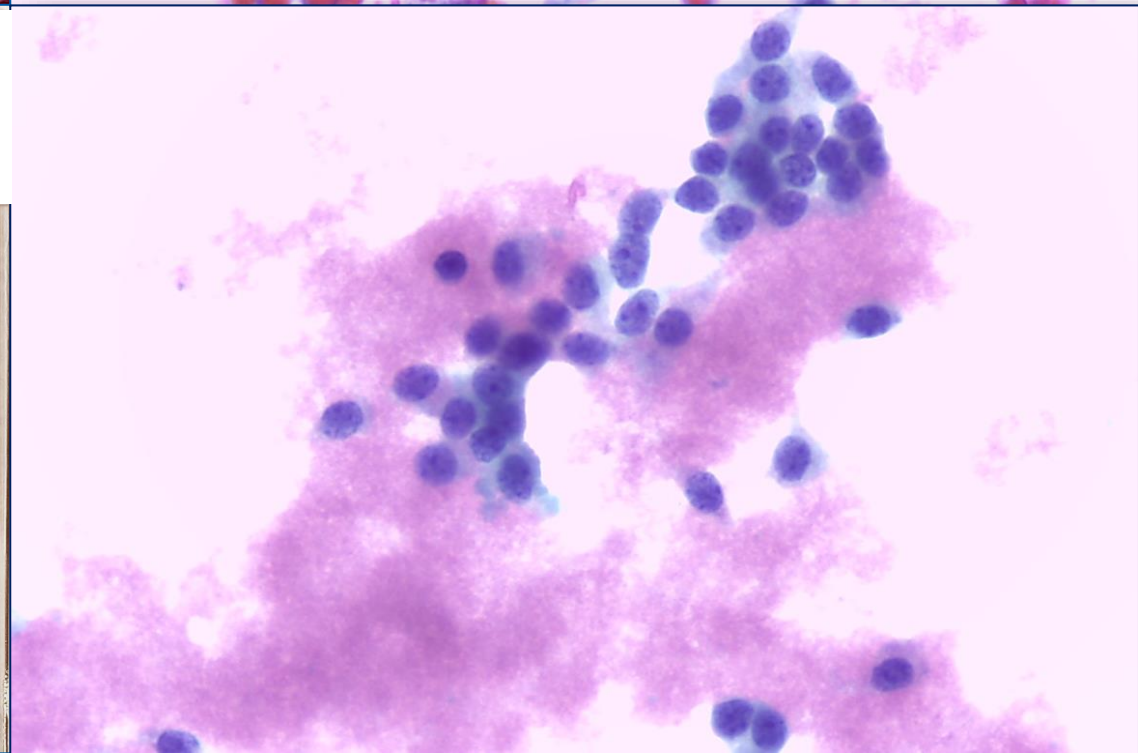
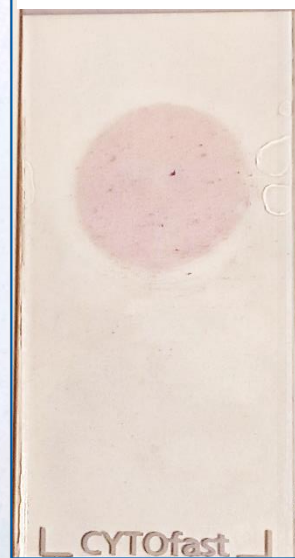
Nodulo solido iso-ipoecogeno, finemente disomogeneo per spots iperecogeni, margini un poco sfumati (EUTIRAD-S 3-4), sito nel lobo sinistro (37 mm)

Provetta incluso 1

M

U

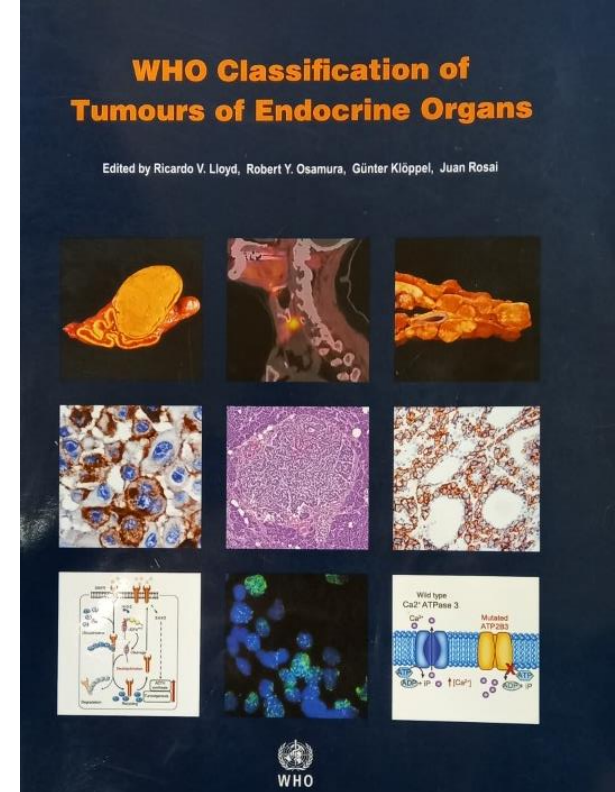
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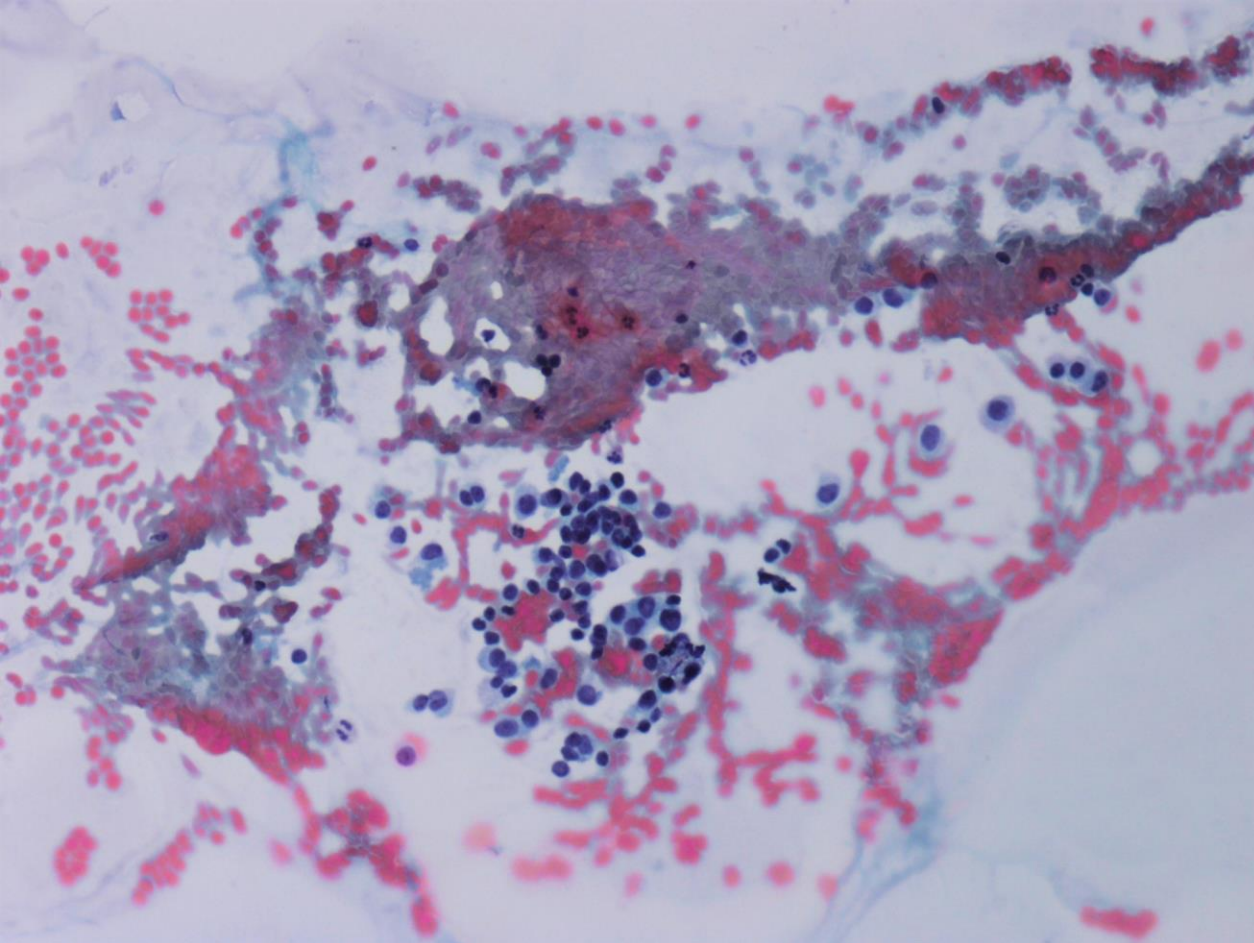


CARATTERISTICHE PATOLOGICHE DEL CARCINOMA MIDOLLARE

“MTCs exhibit a wide variety of histological appearances that can mimic the entire spectrum of thyroid malignancies”

“Fine-needle aspiration biopsy specimens from MTCs display a spectrum of morphological features similar to those noted on histopathological examination”

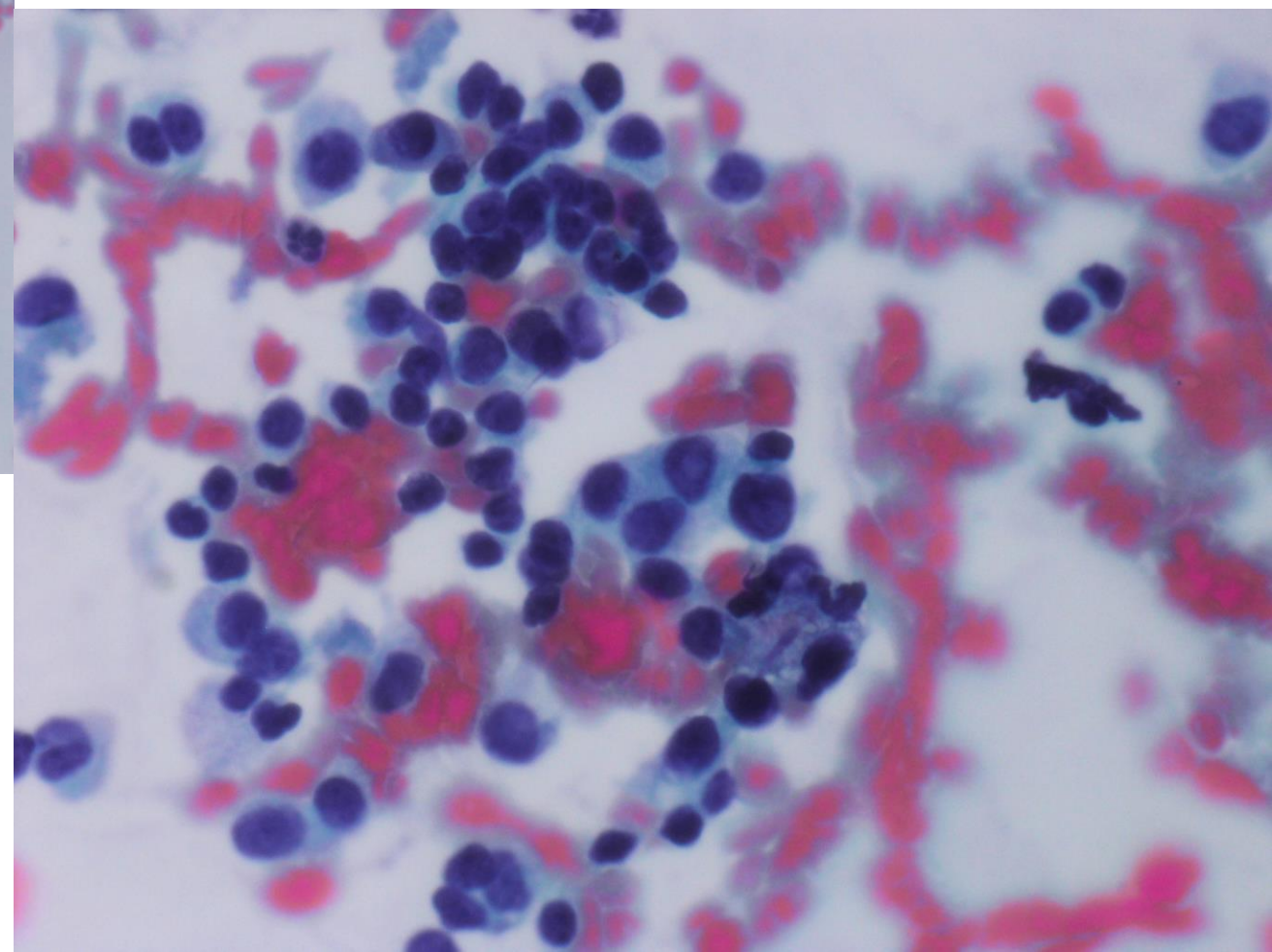


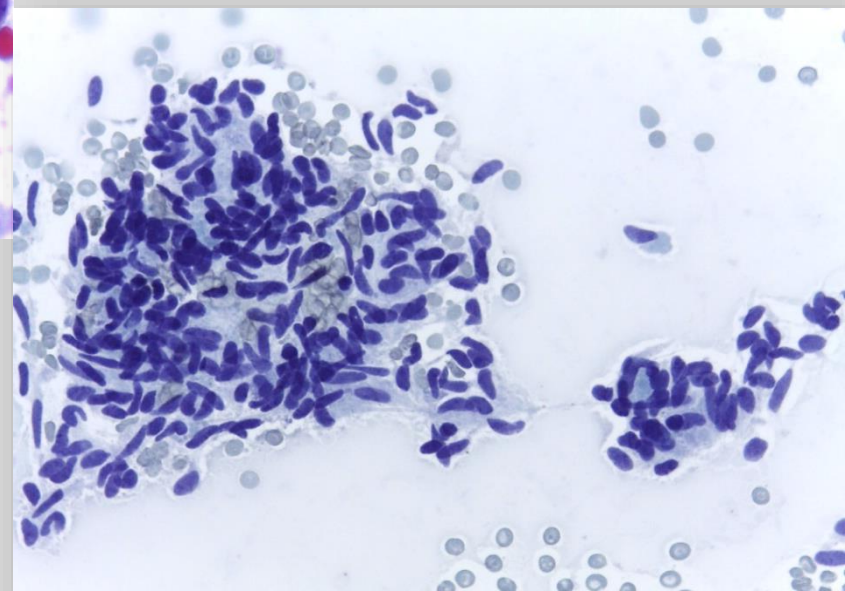
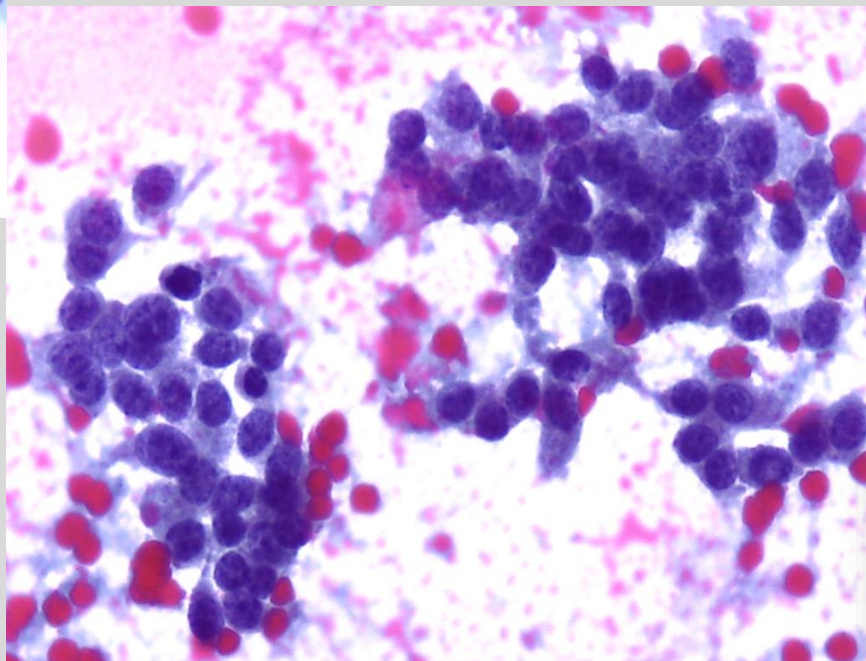
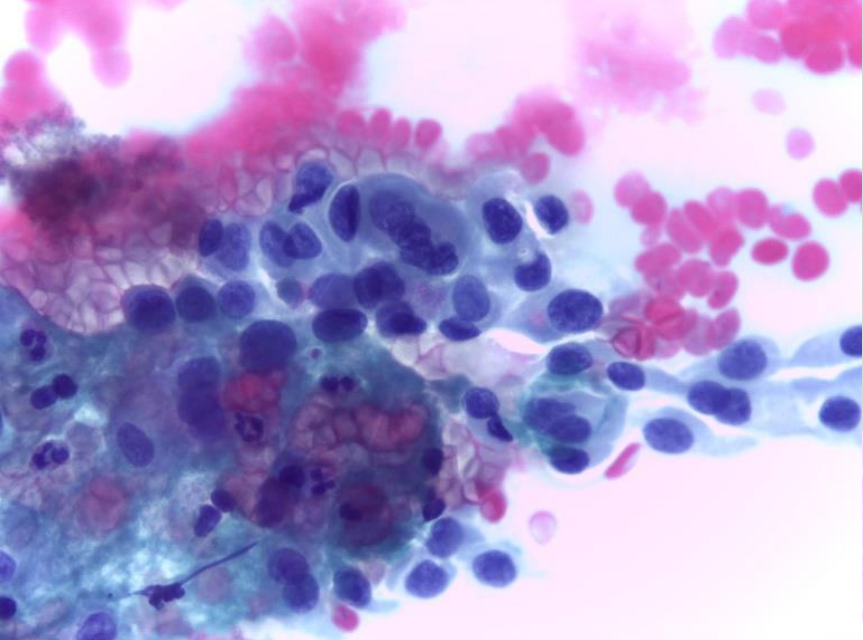


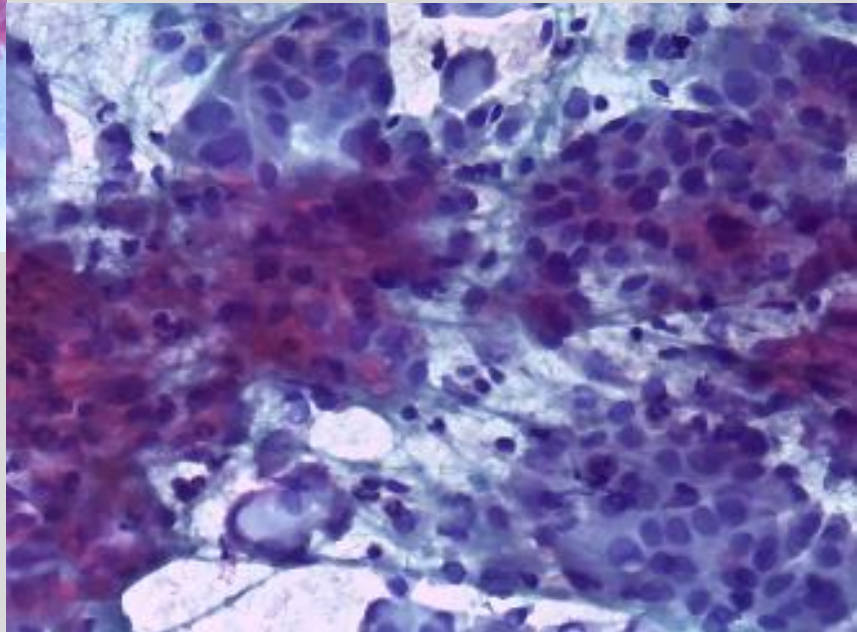
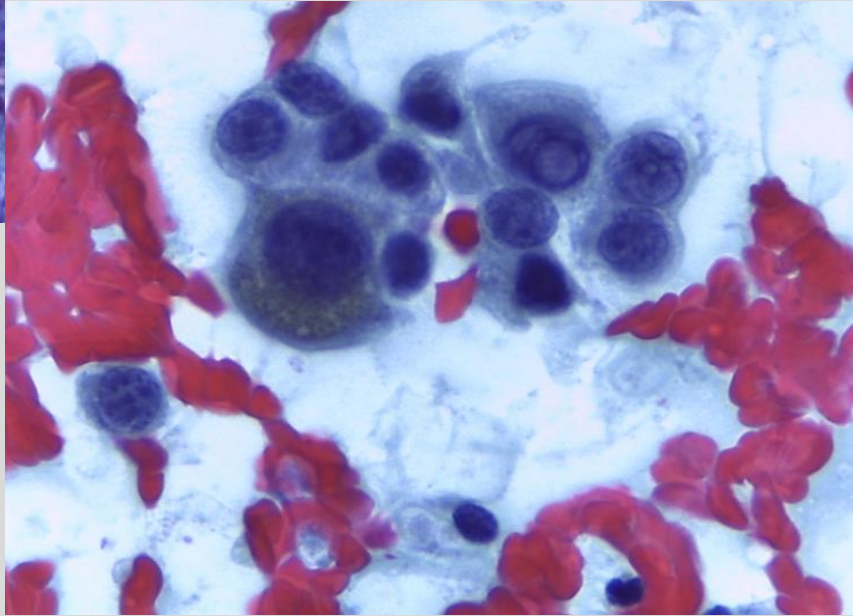
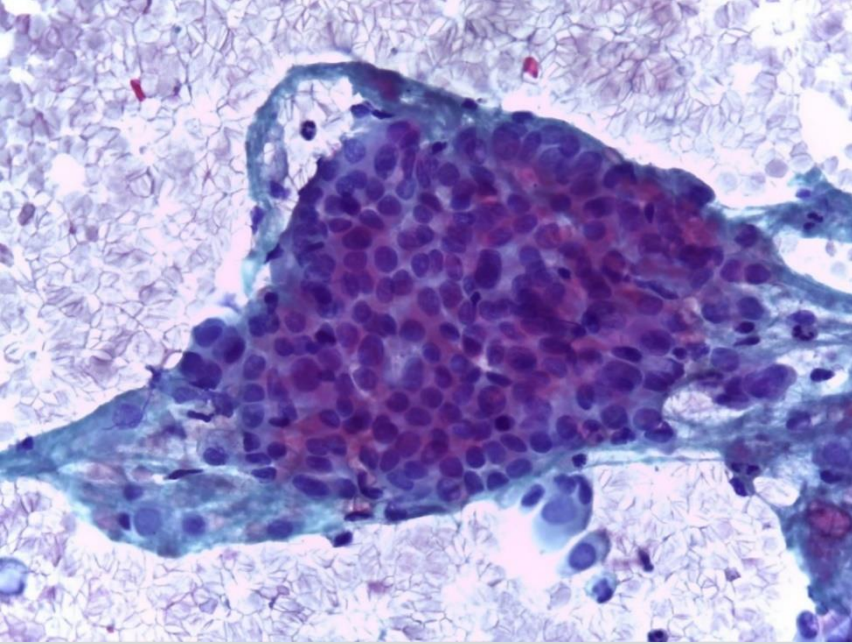
Cellulato
Dispersione
Clusters
poco coesivi

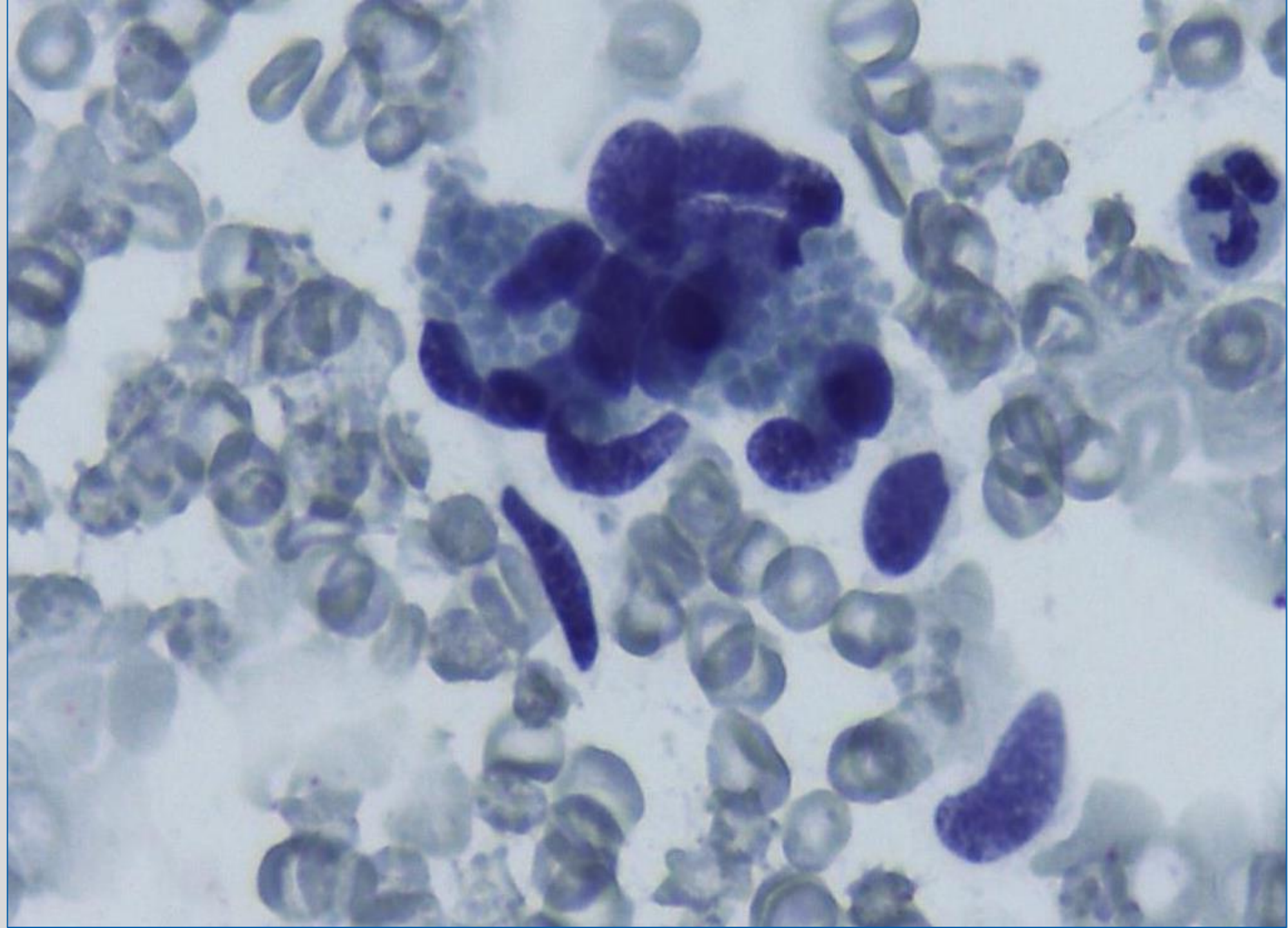
Epitelioidi

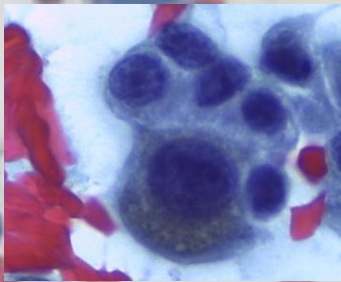
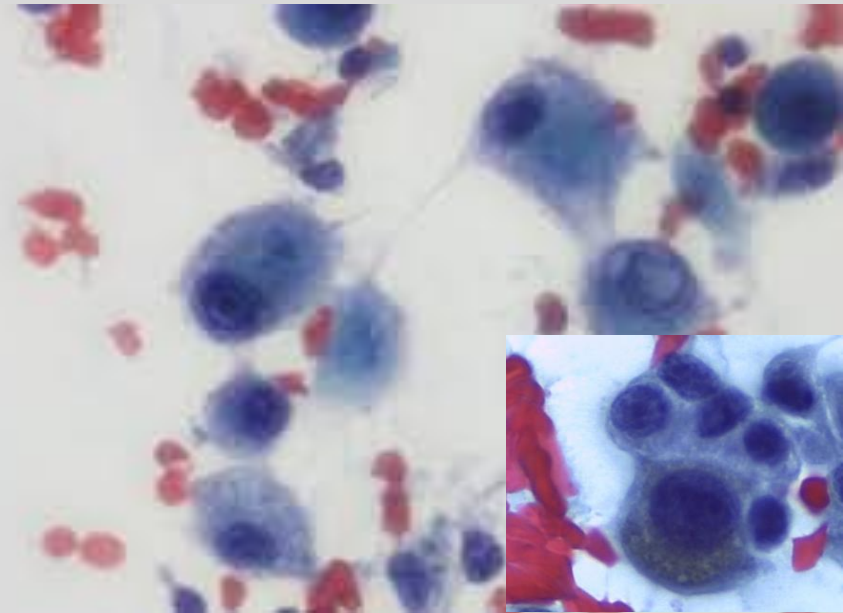
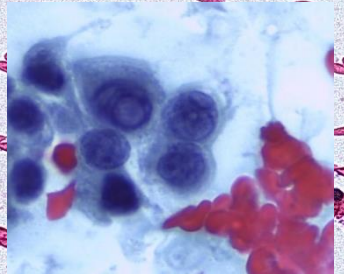
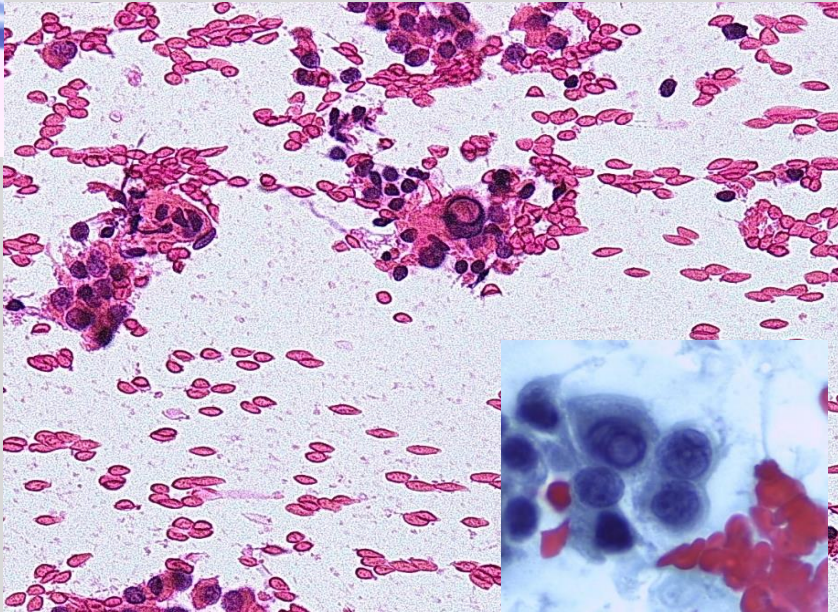
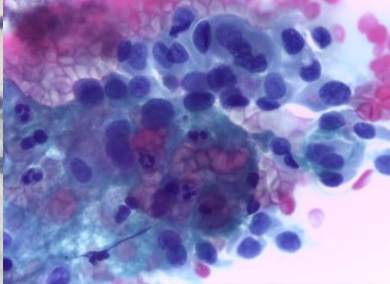
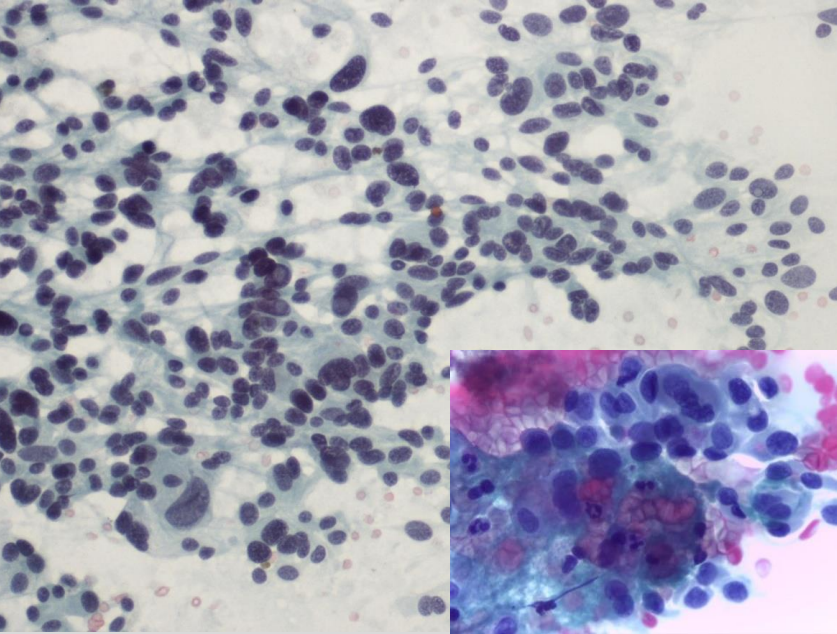
Plasmacitoidi

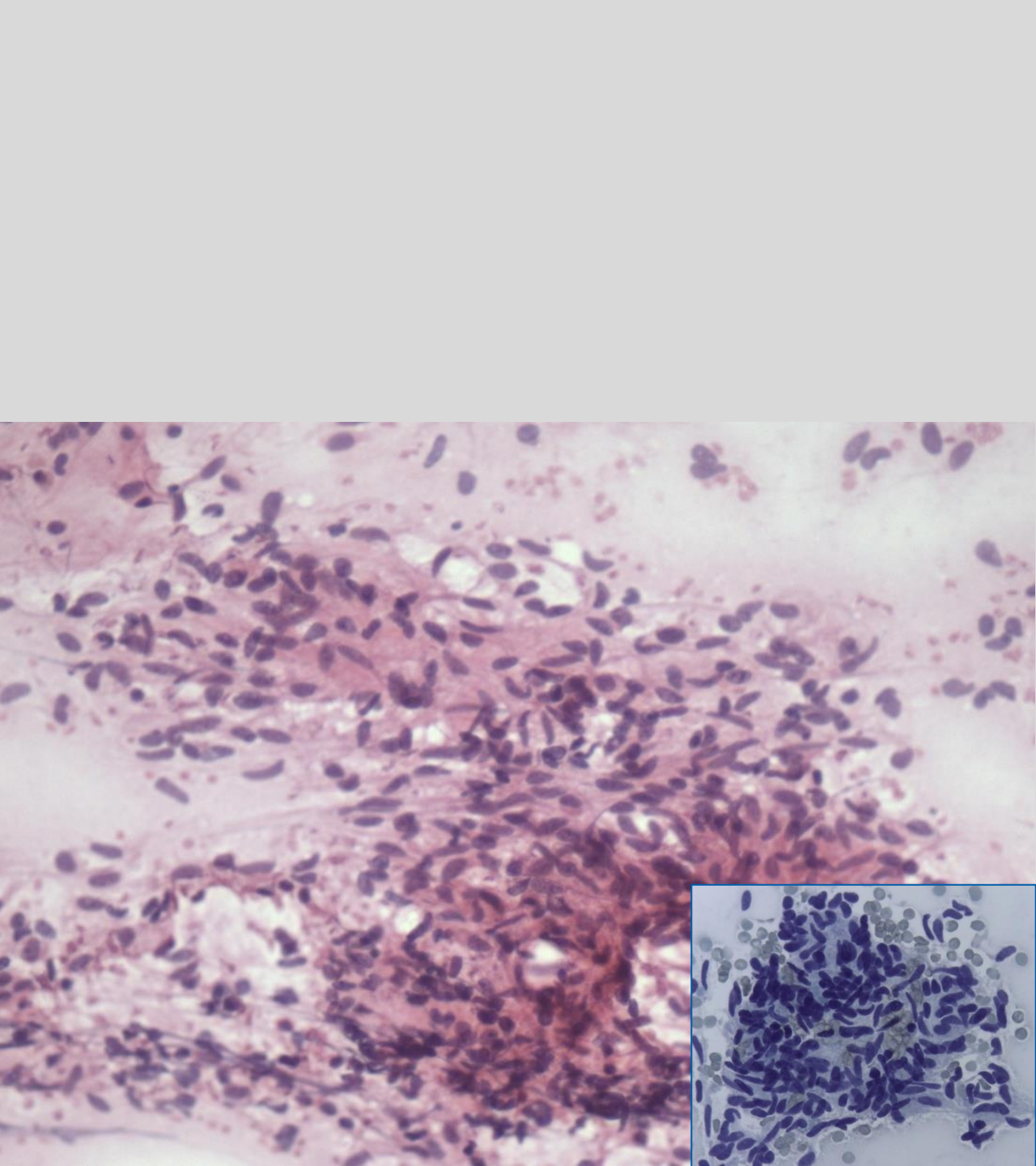
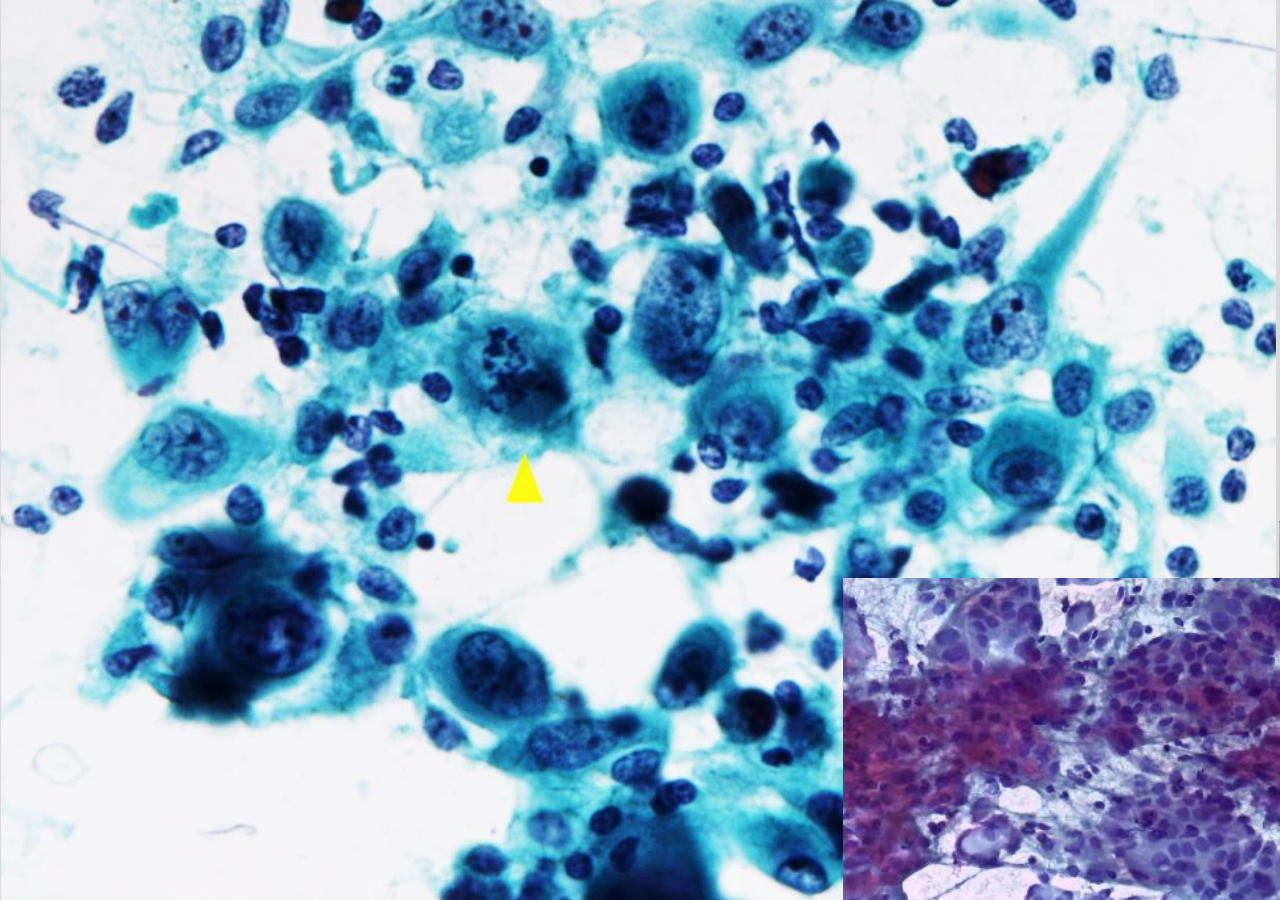


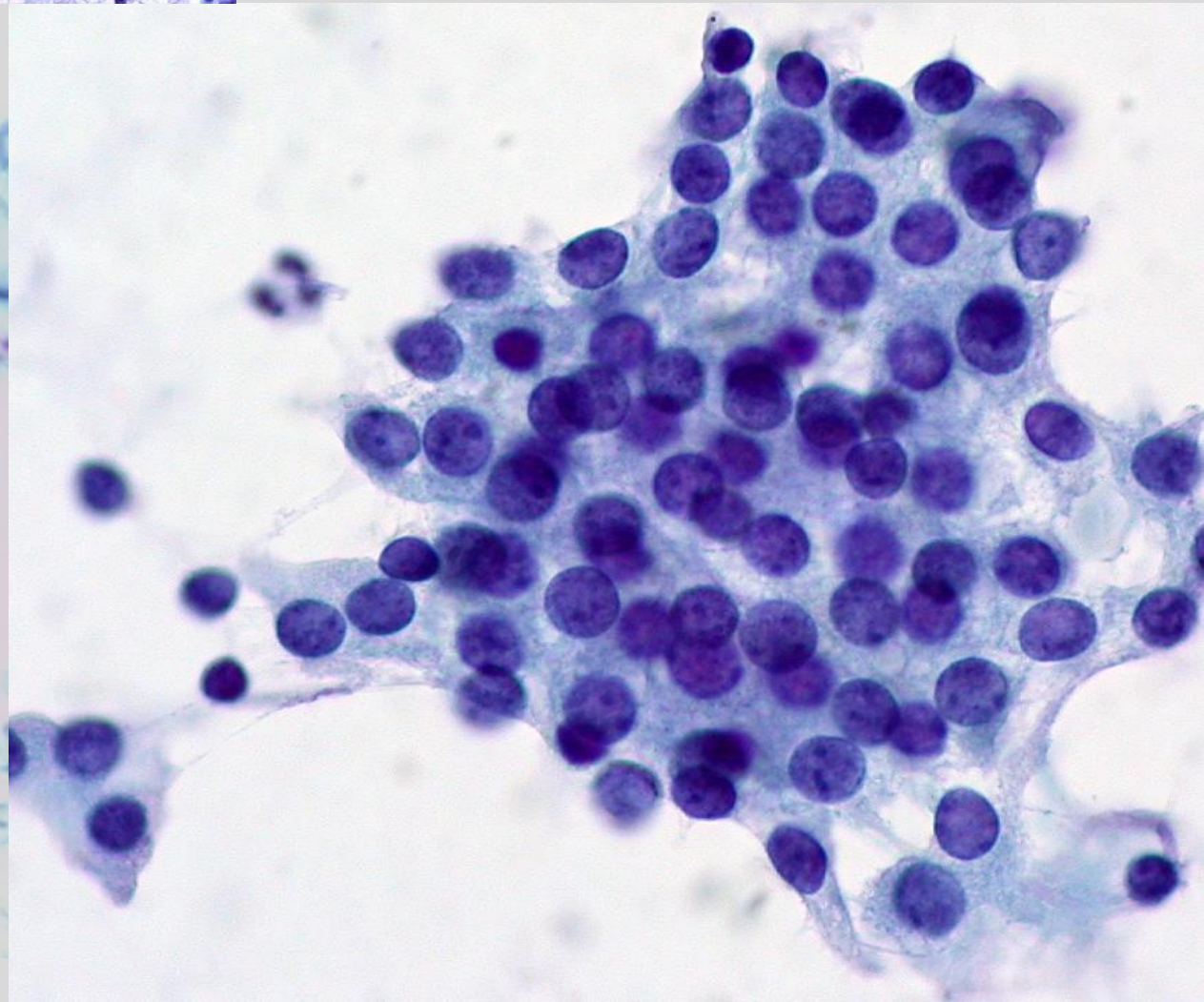
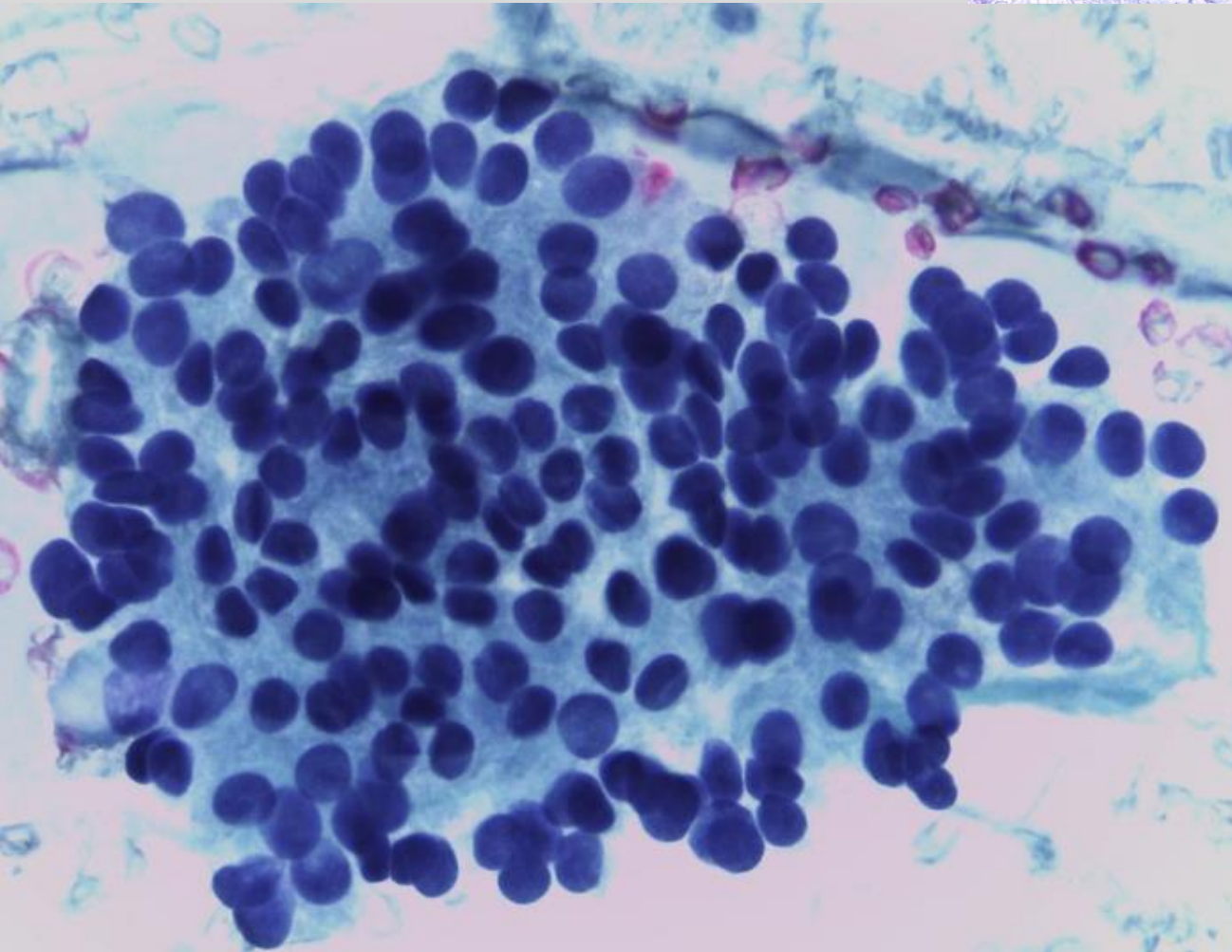
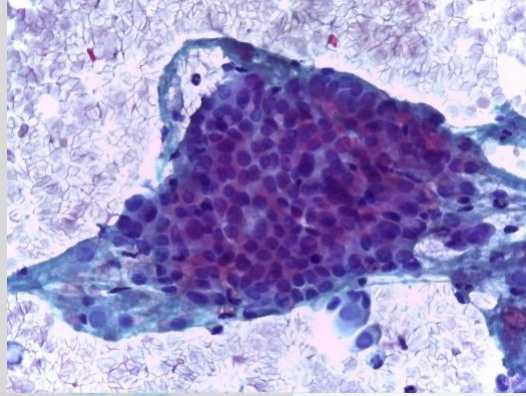




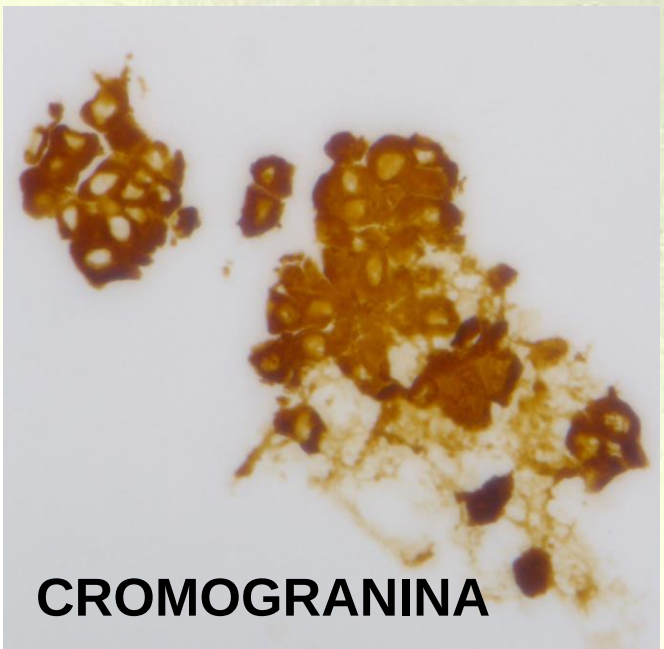




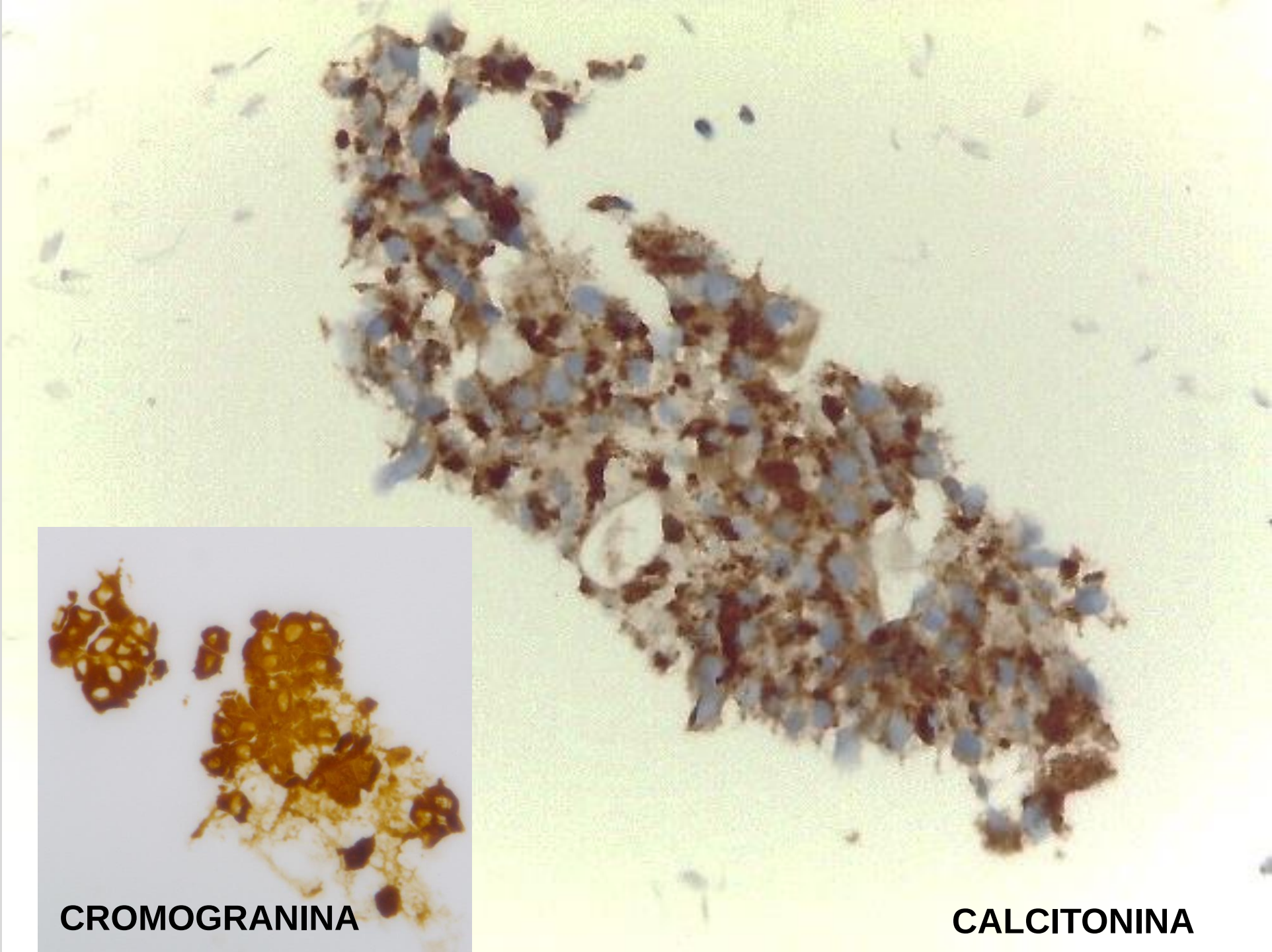




DATI CLINICI



CROMOGRANINA



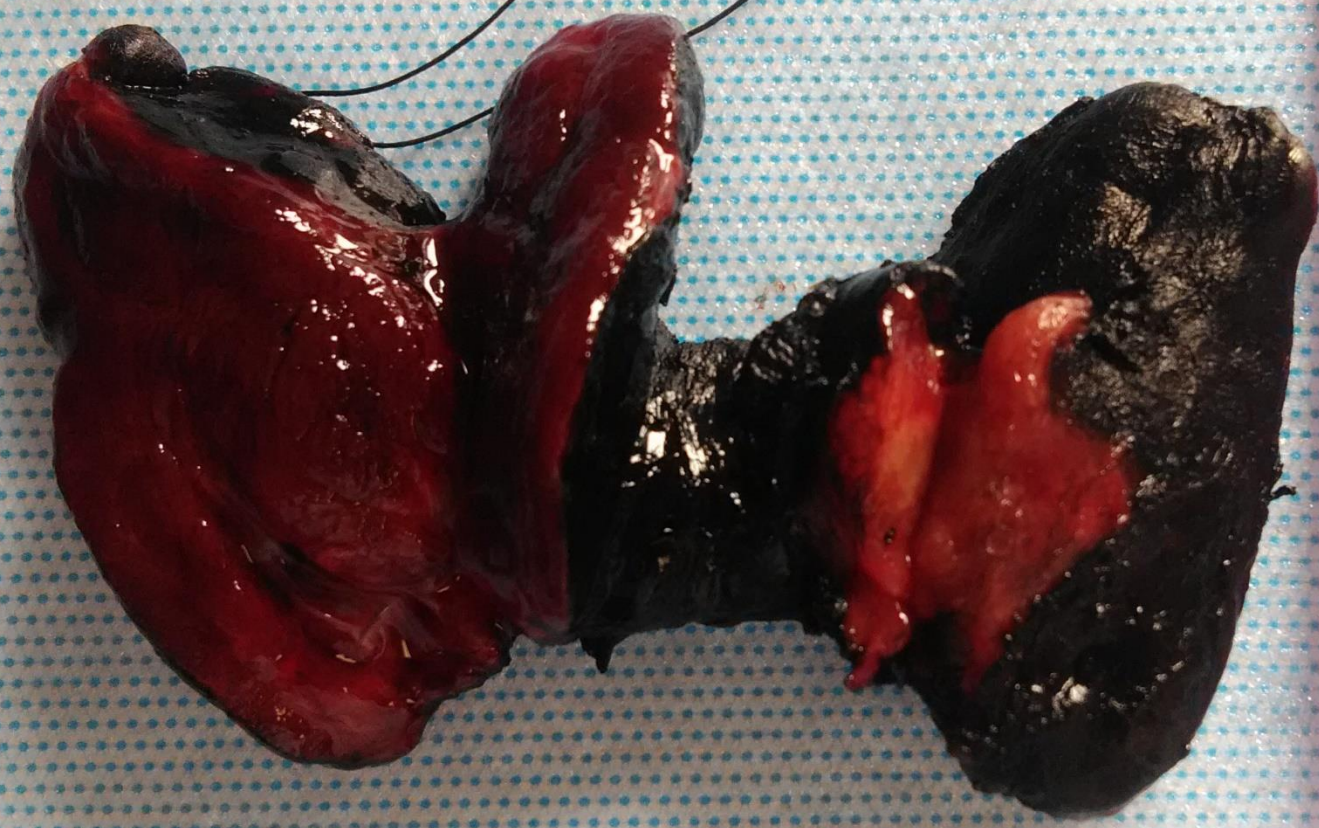
CALCITONINA

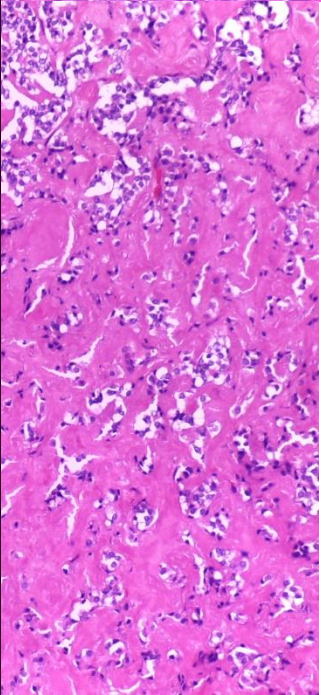
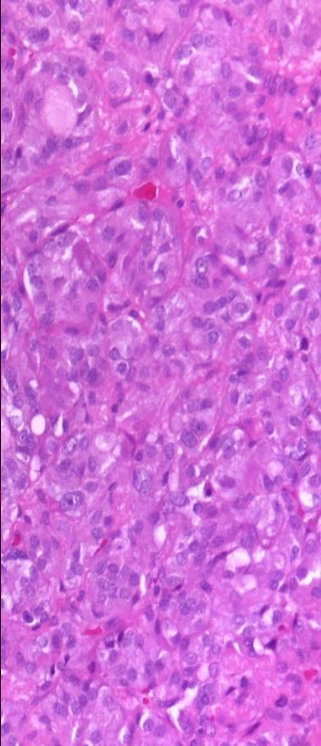
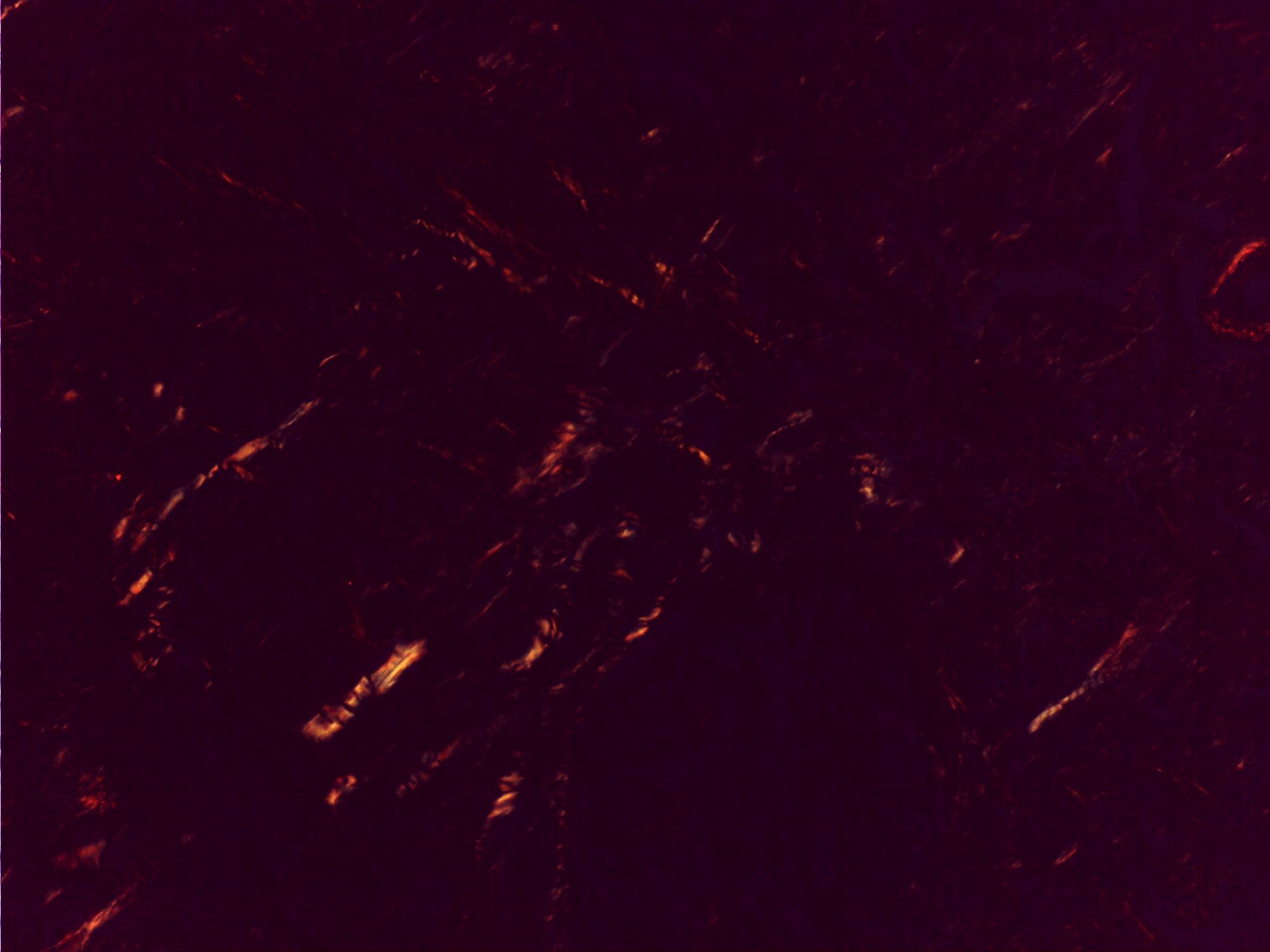
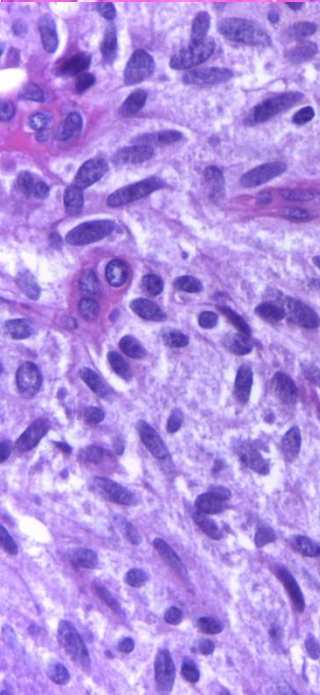
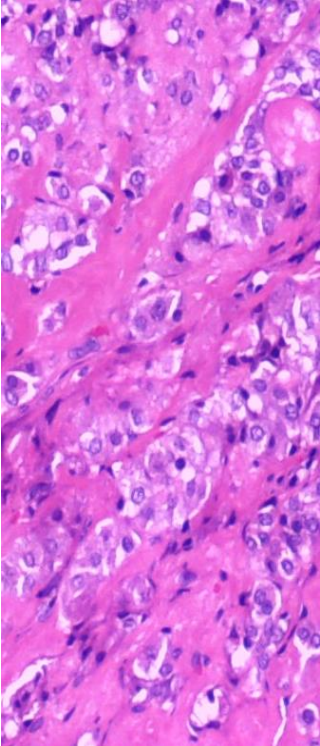
DATI CLINICI

FNAC

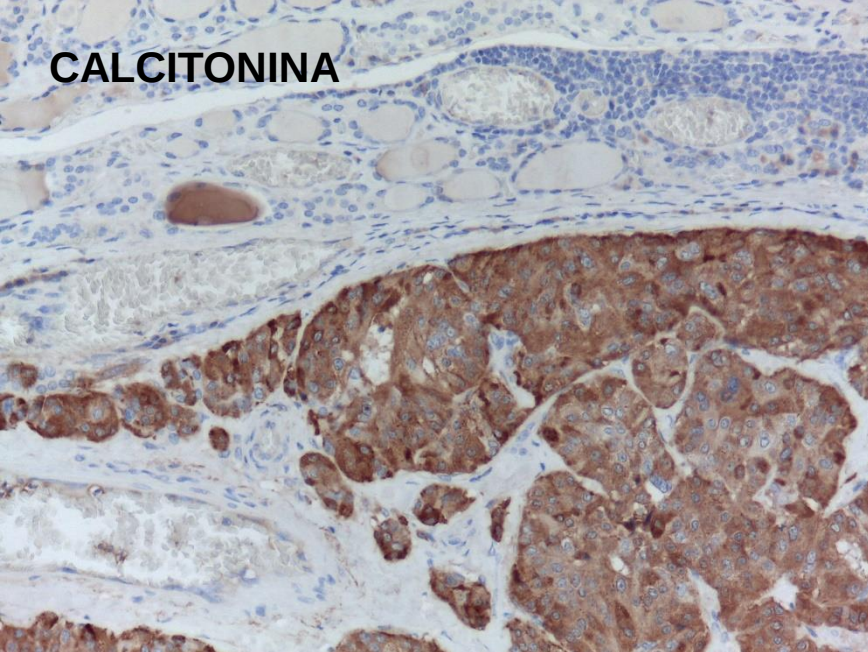
- Sensibilità FNAC : 56.4% al 89%
- Sensibilità FNAC con immunoistochimica 89.2%
- Sensibilità FNAC con dosaggio di calcitonina nel liquido aspirato 98%

Trimboli P et al. Endocrine 2021

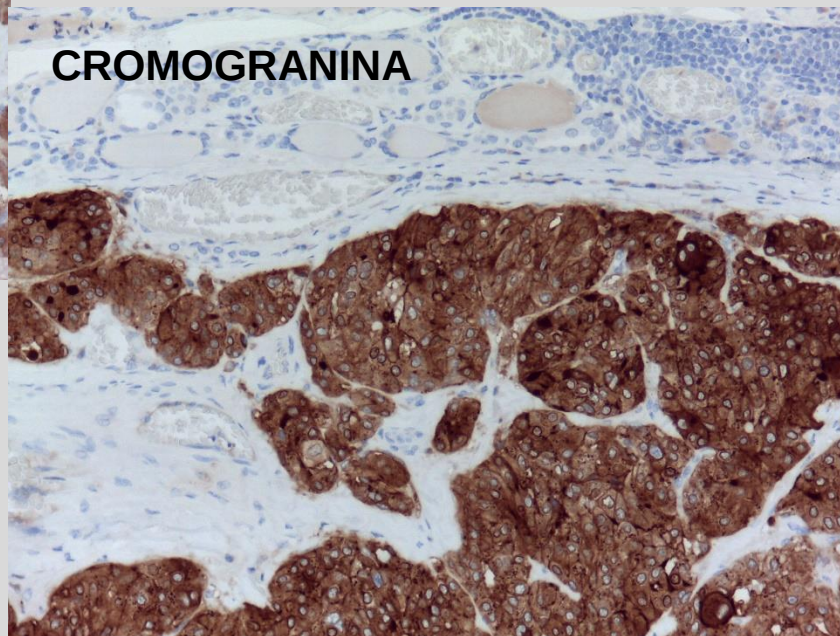




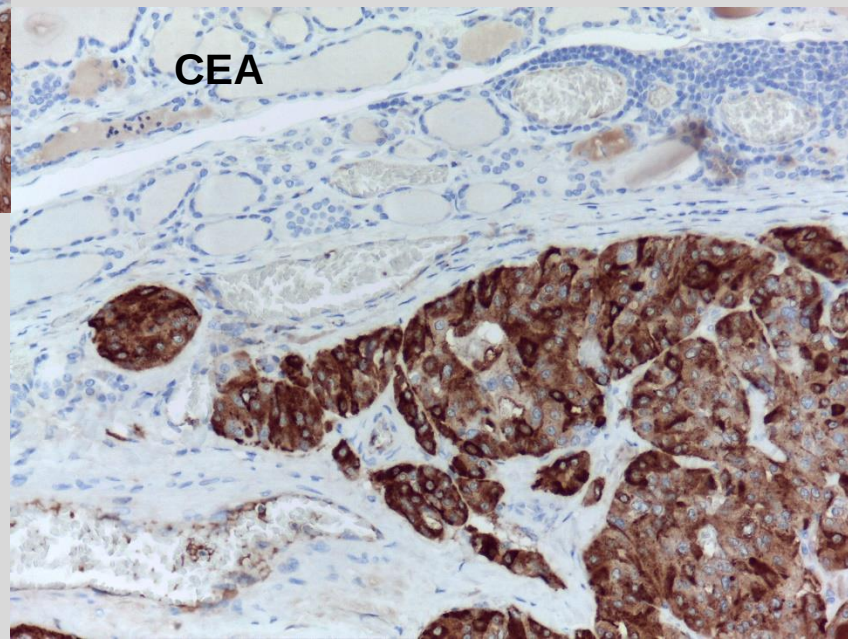
CALCITONINA



CROMOGRANINA



CEA



FATTORI PROGNOSTICI in istologia

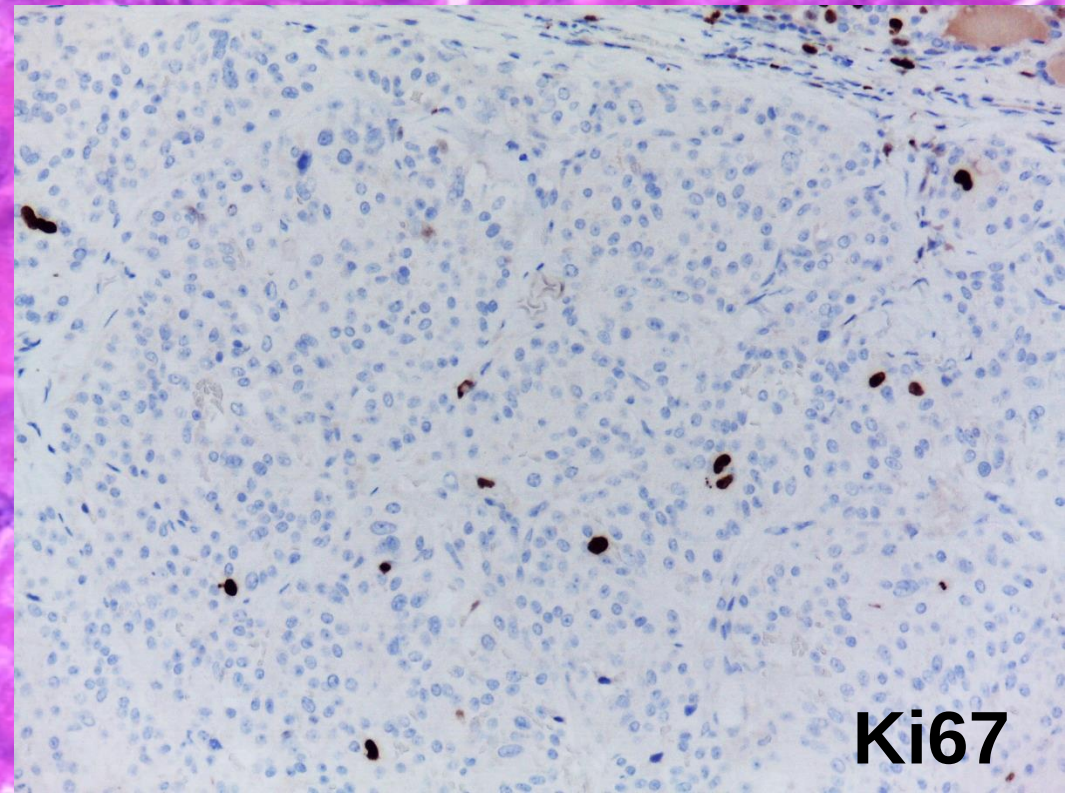
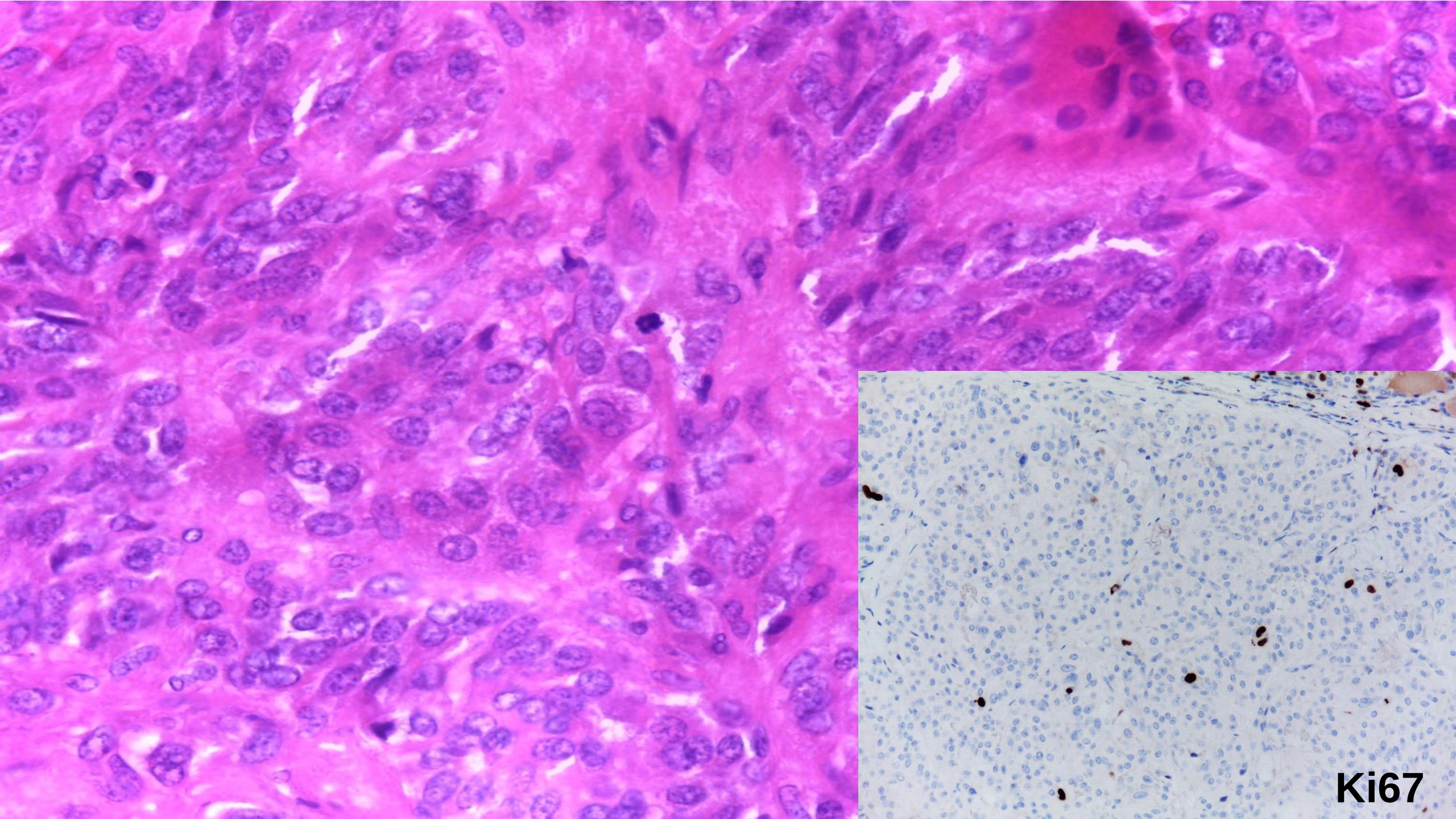
- **Invasione linfo-vascolare, margini positivi ed estensione extratiroidea, reazione desmoplastica⁺ e capsula***

+M.B. Niederle et al., Br J Surg 2021; *Costantino et al. Frontiers in Endocrinology 2022

- **Grado di differenziazione: necrosi tumorale, indice mitotico (≥ 5 mitosi per 2 mm^2) e/o indice proliferativo tramite Ki67 ($\geq 5\%$)**

International Medullary Thyroid Carcinoma Grading System: A Validated Grading System for Medullary Thyroid Carcinoma. Bin Xu et al. J Clin Oncol 2021

WHO 2022



Ki67

CONCLUSIONI

- **Iter diagnostico non specifico**
- **Varietà aspetti cito-patologici**
- **Fattori prognostici: grado di differenziazione e tipo di mutazione (M918T), reazione desmoplastica e capsula, dimensioni (0,5 cm)**



GRAZIE